

AERODYNAMIC TECHNOLOGIES AND SUSTAINABLE STRATEGIES FOR IMPROVING THE OPERATIONAL EXCELLENCE OF TOURISM HOSPITALS IN COIMBATORE

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ABSTRACT

The key growth driver in the healthcare sector is medical tourism where nationals of other countries, visit India to take advantage of quality healthcare at affordable prices; this is also referred as medical value travel. This article will portray the significance of medical tourism in India.

KEYWORDS: *Medical Value Travel, Medical Tourism Facilitator, Medi Cities, Medical Mall, Total Health Centers, Express Clinics, Drones & Wellness Centers*

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INTRODUCTION

SUPERIOR MEDICAL TECHNOLOGIES IN MEDICAL TOURISM

Patients across the globe travel to India for various surgeries, including cardiac, orthopedic procedures and cosmetic and dental surgery. The reason is the high quality of treatment and low-cost care saving ranging from 60 to 90% coupled with excellent customer service such as post-operative care including care during the convalescing period.

There are medical professionals called ‘medical travel facilitators’ who spring into action to help patients. Some corporate companies go abroad to pick up patients. Singapore, Dubai, India, Philippines, and Malaysia are incorporating medical tourism into their economic development strategies and investing substantial resources in the sector.

SIGNIFICANCE OF MEDICAL TOURISM

- If sustainable techniques and appropriate strategies are adopted, Coimbatore city can make a breakthrough in medical tourism
- The association of hospitals in Coimbatore should encourage all hospitals in Coimbatore to get NABH status

- Coimbatore has already emerged as a healthcare training center. This brand image should be exploited to bring international patients to Coimbatore
- Use of drones for carrying organs from hospital to hospital will be a boon to the patients
- A combination of AAYUSH with allopathy for treatment must be examined
- Introduction of air ambulance, nationwide patient registry etc will go a long way in achieving the operational excellence of tourism hospitals in Coimbatore.

TOURISM HOSPITALS IN COIMBATORE

Going by the number of medical visas issued in India, Chennai which is the definitive healthcare capital of India, Chennai gets more numbers than any other city in India. Coimbatore city could be a formidable new entrant. By introducing sustainable technologies and strategies listed hereunder, it is possible to achieve the operational excellence of tourism hospitals in Coimbatore.

COST OF TECHNOLOGY AND MECHANICAL ACCESSORIES

The national pharmaceutical pricing authority (NPPA) is the key regulator for pricing of medical accessories. Recently the price of drug eluting Stents has been reduced to Rupees 27,890 which has been taken exception by medical professionals. Dr Kalarickal who is considered as the Pioneer in angioplasty uses 3rd and 4th generation stents for a majority of his patients. If the price is reduced the Technology becomes inferior due to price restrictions. When we allow best generation of everything from cell phone to kitchen appliances why not Healthcare? The pricing policy dis-incentivize companies from launching products with superior technology. When the technology is superior as in the case of 3rd and 4th generation stents, the complication goes down marginally. The NPPA should draw a line of balance between the price and Technology.

TECHNICAL EVALUATION AND NATIONAL ACCREDITATION FOR HOSPITALS

The National accreditation Board for hospitals has formulated stringent norms. Some of the NABH norms are use of blood components instead of whole blood, proper documentation of records and improved sanitation

TECHNICAL PARAMETERS FOR EVALUATION

- Hepa filters in operation theatres
- Central sterile Services Department
- Outsourcing of sanitation and security

TECHNICAL AND PARAMETRIC BENEFITS TO HOSPITALS AND PATIENTS

- Modern Technology and Innovation
- Reduces Hospital acquired infection
- Strict antibiotic policy prevents drug resistance
- Continuous monitoring of patients

- save money
- improved patient satisfaction

The association of hospitals should evolve a comprehensive program to achieve NABH status for all hospitals in Coimbatore City in a phased manner and examine the following. Specifically technologically superior equipments for testing of patient parameters must be considered.

- Introducing the concept of Corporate hospitals
- Apollo Hospital model- culture of being accountable
- Hospital Corporation of America model (HCA)
- Joint Commission International accreditation (JCI)

TECHNICAL COMPETENCY OF PROFESSIONALS AT COIMBATORE, A CENTRE FOR MULTI SPECIALITY HEALTHCARE TRAINING

Coimbatore is internationally known for its Healthcare facilities and for the focused training programs offered in the surgical field. The system is well regulated and there are norms for infrastructure and training courses. Hospitals here have developed required infrastructural facilities and created the required resources. Such facilities help the surgeons know more about the latest development in specialty areas. This competency of organizing specialty Healthcare training in surgery by Coimbatore hospitals by using most modern medical equipments and technologies has given them an edge in creating a Coimbatore - brand for Healthcare. Internationally superior medical equipments available in the market should be utilized in hospitals, which will go a long way in achieving 'Coimbatore' Brand. Many surgeons from developed Nations come here, stay for a week or two in some cases even for 2 years to learn more about the latest techniques in specific areas. A city that is on the world map for its Industrial strength is now a destination in Healthcare training in specialty areas. This brand image is likely to bring more foreign patients in the near future.

THE TECHNOLOGY OF ORGAN TRANSPLANTATION

National organ and tissue transplant organization and other stakeholders have drawn a roadmap for documenting patient progress, networking all transplant hospitals in the country and also figured out the official policy to treat out of turn request for organs. National registry of organ and tissue Donor has been developed which will help in maintaining data and surveillance. India's still nascent organ transplant program is making progress and it's not things like life saving traffic green corridors that are smoothened out the wrinkles.

THE MODERN TECHNOLOGY OF TRANSPORT - AERIAL VEHICLES / DRONES

The use of drones for Transport of the organ from the place of the donor to the place of beneficiary or from one hospital to another in the same city will go a long way in solving the problems arising out of a green transport corridor. MIT, Chennai has developed a Drone capable of operating on 30 km radius which will be helpful in cities like Coimbatore.

INFORMATION TECHNOLOGY IN COMPREHENSIVE TRAUMA CARE

The Tamil Nadu Government proposes to develop a trauma care policy for the state by partnering with Australia's national trauma research Institute.

It is called trauma call out. It will ensure that the hospital is ready to receive the patient, prepares for the resuscitation and Orthopedic care and ends with the rehabilitation of the patient. The Government of Tamilnadu with the help of IIT Madras launched a mobile app named Tamil Nadu accident and emergency initiative (TAEI). The App will connect trauma care professionals across the state giving them information on the protocol to be adopted for injuries.

TECHNOLOGY DEVELOPMENT IN TELEMEDICINE

Telemedicine is emerging as a growth driver in health care. A combination of existing poor health care delivery and an easy access to Technology has made telemedicine a strong growth story in the healthcare industry while there will be an explosion of apps telemedicine, point of care testing, we will still need to put together a lot of bricks and mortar to allow this to take place says Amit Verma, managing partner, Quadria capital. The model of a telemedicine project began in the state of Odisha that is creating jobs and widening Healthcare access now going national. This unique model focuses on sustainability involves training of local youth in e-medicine services and enables them to set up e- health centers in any society. This model has been adjudged as one of the 8 best practices globally. The WHO too believes telemedicine to be particularly beneficial for rural and underserved communities in developing countries. Telemedicine offers phenomenal opportunities to doctors the reach out to patients across the globe.

FITNESS TECHNOLOGIES IN WELLNESS CENTRES

Many technological accessories and equipments are available in the international market, which would be procured and installed in wellness centers which could serve as fitness center also.

- Ayush
- Ayurveda
- yoga
- Unani
- siddha
- homeopathy

Lack of standardization in the holistic options-- including Ayurveda, yoga and the gamut of such services- and lack of effort in combining Alternative Medicine systems with allopathic treatment must be explored. This is a large area of untapped opportunity which has long been neglected. The Apollo Hospitals have already begun to focus on Wellness centers where alternative therapies are given their due. This is one area where India has a definite and Indigenous edge and opportunity to unleash its potential is phenomenal. Kerala has already shown us the way. Coimbatore City situated adjacent to the state of Kerala has a strong potential to Unleash.

TECHNOLOGY IN HOMEOPATHIC CURES

Central Council for Research in homeopathy has tried to Homeopathic cures for a variety of epidemic diseases such as dengue, chikungunya and encephalitis. The organization has signed MOUs with various European and North American countries to import homeopathic plants in India to produce medicines for the Homeopathic drug industry. They have introduced in Nilgiris in new technology- a rigid playhouse- a structure with plants and crops are grown in a fully controlled environment to ensure maximum growth.

BIOMEDICAL ENGINEERING INSTITUTIONS TO SUPPORT DENSITY OF DOCTORS IN INDIA- WHO STUDY

Who studies published in June 2016 reveal that India has 36 qualified doctors for a lack of population, while China has 130. In case of Dentist it's even worse. The national level density is low at 2.4 per lakh population. The study would provide an extremely valuable benchmark for formulating Strategies for future development. An appropriate strategy adopted will increase the doctor per lakh of population, which provides what choice to the tourist patients to have, Doctor shopping.

It may lead to the establishment of medical Mall where all the specialists will be located in one place. The advanced facility will be a Medicity where world class facilities to meet the needs of all medical tourists will be made available without any shortfall.

THE TECHNOLOGY OF AERODYNAMICS - AIR AMBULANCE

Transport of a critically ill patient or an accident victim through surface transport ambulance is not appropriate. Besides, we need to transport the patient in time and international patient needs to be transported as quickly as possible from the airport to the hospital. Ganga Hospital in Coimbatore has the facility of air ambulance, the first to be approved by DGCA. Critical Care air transport unit team formulated by Indian Air Force in 2007 to transport critically ill or wounded soldiers from the battlefield is one of the best models. The Ganga Hospital, Coimbatore air ambulance is equipped with emergency support systems and can carry a maximum of 2 patients at a time and fly 230 nautical miles two ways or 42 km one way before next fuelling. Immediate and specialized medical treatment will now be available not just for those in or near Coimbatore but at distances as far as the air ambulance can fly and land. This is a Landmark achievement in the field of trauma care. Every Hospital should have a helipad on the rooftop and at least one air ambulance

THE TECHNOLOGY OF INFORMATION SYSTEMS IN PATIENT REGISTRY

Networking of accredited hospitals will enable the patients to utilize the same test results in all hospitals

Speed, expertise and Technology will have the key to save people from death when they have a serious medical problem such as heart attack. Such coordination is possible through networking of hospitals. With a biometric identity on a global scale, a patient need not undergo tests under every Hospital, if the hospital functions of a network.

CONCLUSIONS

Even tiny technologies like 3rd and 4th generation stents are imported. Many hospitals imports even cots for the patients. Currently, the medical equipment industry provides greater opportunities. Coimbatore city has engineering excellence, cost-effective labor and hence could provide an ideal manufacturing base even for larger medical equipment. If a proper strategic approach is made to the problems in medical tourism the industrial city of Coimbatore can showcase the operational excellence of tourism hospitals in Coimbatore.

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